

Claims

I claim:

1. A method for treatment of an individual demonstrating behavioral characteristics associated with autism comprising the steps of:
 - 5 administering to said individual a composition comprising a therapeutically effective amount of oxytocin.
2. The method of claim 1, wherein said oxytocin is an oxytocin analog selected from the group consisting of 4-threonine-1-hydroxy-deaminooxytocin, 9-deamidooxytocin, 7-D-proline-oxytocin and its deamino analog, (2,4-
 - 10 diisoleucine)-oxytocin, deamino oxytocin analog, 1-deamino-1-monocarbamoyl-oxytocin, deamino oxytocin analog, 1-deamino-1-monocarbamoyl-oxytocin, carbetocin, Ile-conopressin, atosiban, [Thr4-Gly7]-oxytocin, oxypressin, deamino-6-carba-oxytocin (dC60), d[Lys(8)(5/6C-Flu)]VT, d[Thr(4),Lys(8)(5/6C-Flu)]VT, [HO(1)][Lys(8)(5/6C-Flu)]VT, [HO(1)][Thr(4),Lys(8)(5/6C-Flu)]VT, d[Orn(8)(5/6C-Flu)]VT,
 - 15 d[Thr(4),Orn(8)(5/6C-Flu)]VT, [HO(1)][Orn(8)(5/6C-Flu)]VT, [HO(1)][Thr(4),Orn(8)(5/6C-Flu)]VT and oxytocin fragments.
3. The method of claim 1 wherein said behavioral characteristic associated with autism is selected from the group consisting of a repetitive behavior, a deficit in social awareness, a deficit in cognitive skills, a need to know, a need
 - 20 to order, a need to tell, a need to ask, a self-injurious behavior and a need to touch.
4. The method of claim 1 wherein said therapeutically effective amount of oxytocin ranges from 0.1 unit per hour to 7 units per hour.
5. The method of claim 1 wherein said composition is oxytocin.

6. In a method for treatment of an individual, demonstrating behavioral characteristics associated with autism by administration of psychopharmacologic agents, the improvement comprising:

5 additional administration of a therapeutically effective amount of a composition comprising oxytocin, oxytocin analog or combination thereof.

7. The method of claim 6 wherein said oxytocin is an oxytocin analog selected from the group consisting of 4-threonine-1-hydroxy-deaminooxytocin, 9-deamidooxytocin, 7-D-proline-oxytocin and its deamino analog, (2,4-
10 diisoleucine)-oxytocin, deamino oxytocin analog, 1-deamino-1-monocarba-E12-[Tyr (OMe)]-OT(dCOMOT), carbetocin, Ile-conopressin, atosiban, [Thr4-Gly7]-oxytocin, oxypressin, deamino-6-carba-oxytoxin (dC60), d[Lys(8)(5/6C-Flu)]VT, d[Thr(4),Lys(8)(5/6C-Flu)]VT, [HO(1)][Lys(8)(5/6C-Flu)]VT, [HO(1)][Thr(4),Lys(8)(5/6C-Flu)]VT, d[Orn(8)(5/6C-Flu)]VT,
15 d[Thr(4),Orn(8)(5/6C-Flu)]VT, [HO(1)][Orn(8)(5/6C-Flu)]VT, [HO(1)][Thr(4),Orn(8)(5/6C-Flu)]VT and oxytocin fragments.

8. The method of claim 6, wherein said psychopharmacologic agent is selected from the group consisting of sedatives, tranquilizers, antipsychotics, antidepressants and anticonvulsants.

20 9. The method of claim 6, wherein said psychopharmacologic agent affects the opiate, noradrenergic, dopaminergic, serotonergic, glutamatergic and GABAergic systems.

10. The method of claim 6 wherein said behavioral characteristic associated with autism is selected from the group consisting of a repetitive behavior, a

deficit in social awareness, a deficit in cognitive skills, a need to know, a need to order, a need to tell, a need to ask, a self-injurious behavior and a need to touch.

11. The method of claim 6 wherein said therapeutically effective amount
5 ranges from 0.1 unit per hour to 7 units per hour.
12. The method of claim 6 wherein said composition is oxytocin.
13. A method for treatment of an individual demonstrating behavioral characteristics associated with autism comprising the steps of:
 - a) administering an oxytocin solution intravenously to said individual
10 for four hours, the dose rate of said solution initially to be at 0.1 unit per hour to increase every 15 minutes of the first hour by .25 units per hour, said dose rate of said solution to be increased every 15 minutes of the second hour by 0.5 unit per hour, said dose rate of said solution to be increased every 15 minutes of the third hour by 1 unit per hour
15 and said dose rate of said solution to remain constant at 7 units per hour the fourth hour.
14. A method for treatment of an individual demonstrating repetitive behaviors, social deficits or cognitive deficits comprising the steps of:
 - a) administering an oxytocin solution intravenously to said individual
20 for four hours, the dose rate of said solution initially to be at 0.1 unit per hour to increase every 15 minutes of the first hour by .25 units per hour, said dose rate of said solution to be increased every 15 minutes of the second hour by 0.5 unit per hour, said dose rate of said solution to be increased every 15 minutes of the third hour by 1 unit per hour

and said dose rate of said solution to remain constant at 7 units per hour the fourth hour.

15. A method for treatment of an individual with a disorder including repetitive behaviors, social deficits and cognitive deficits comprising the steps of:

5 administering to said individual a composition comprising a therapeutically effective amount of oxytocin.

16. The method of claim 15, wherein said oxytocin is an oxytocin analog selected from the group consisting of 4-threonine-1-hydroxy-deaminooxytocin, 9-deamidooxytocin, 7-D-proline-oxytocin and its deamino analog, (2,4-diisoleucine)-oxytocin, deamino oxytocin analog, 1-deamino-1-monocarb-
10 E12-[Tyr (OMe)]-OT(dCOMOT), carbetocin, Ile-conopressin, atosiban, [Thr4-Gly7]-oxytocin, oxypressin, deamino-6-carba-oxytocin (dC60), d[Lys(8)(5/6C-Flu)]VT, d[Thr(4),Lys(8)(5/6C-Flu)]VT, [HO(1)][Lys(8)(5/6C-Flu)]VT, [HO(1)][Thr(4),Lys(8)(5/6C-Flu)]VT, d[Orn(8)(5/6C-Flu)]VT,
15 d[Thr(4),Orn(8)(5/6C-Flu)]VT, [HO(1)][Orn(8)(5/6C-Flu)]VT, [HO(1)][Thr(4),Orn(8)(5/6C-Flu)]VT and oxytocin fragments.

17. The method of claim 15 wherein said behavioral characteristic associated with autism is selected from the group consisting of a repetitive behavior, a deficit in social awareness and a deficit in cognitive skills.

20 18. The method of claim 15 wherein said therapeutically effective amount of oxytocin, oxytocin analog or combination thereof is 10ug/mL.

19. The method of claim 15 wherein said composition is oxytocin.

20. The method of claim 15, wherein said disorder including repetitive behaviors is selected from the group consisting of Obsessive-Compulsive

Disorder, eating disorders, Body Dysmorphic Disorder, trichotillomania, hypochondriasis, Tourette's Syndrome, Depersonalization Disorder, Impulse Control Disorder, Pathological Gambling Disorder, Internet Addiction Pyromania, Compulsive Shopping Disorder, Compulsive Sexual Behaviors, 5 kleptomania, Intermittent Explosive Disorder, Sydenham's Chorea Torticollis and Stereotypic Disorders.

21. The method of claim 15, wherein said disorder including social deficits is selected from the group consisting of Social Anxiety Disorder, Schizoid Personality Disorder, Schizotypal Personality Disorder, Borderline Personality Disorder, attachment disorders and attachment disorders secondary to other 10 factors.

22. The method of claim 15, wherein said disorder including cognitive deficits is selected from the group consisting of Alzheimer's Disease, Jacob creutzfeld's Disease, Down's Syndrome, Mild Cognitive Decline, Attention 15 Deficit Disorder and Attention Deficit Hyperactivity Disorder.

23. In a method for treatment of an individual with a disorder including repetitive behaviors, social deficits and cognitive deficits, by administration of psychopharmacologic agents, the improvement comprising:

20 additional administration of a therapeutically effective amount of a composition comprising oxytocin, oxytocin analog or combination thereof.

24. The method of claim 23 wherein said oxytocin is an oxytocin analog selected from the group consisting of 4-threonine-1-hydroxy-deaminooxytocin, 9-deamidooxytocin, 7-D-proline-oxytocin and its deamino analog, (2,4-

diisoleucine)-oxytocin, deamino oxytocin analog, 1-deamino-1-monocarba-E12-[Tyr (OMe)]-OT(dCOMOT), carbetocin, Ile-conopressin, atosiban, [Thr4-Gly7]-oxytocin, oxypressin, deamino-6-carba-oxytoxin (dC60),
 5 d[Lys(8)(5/6C-Flu)]VT, d[Thr(4),Lys(8)(5/6C-Flu)]VT, [HO(1)][Lys(8)(5/6C-Flu)]VT, [HO(1)][Thr(4),Lys(8)(5/6C-Flu)]VT, d[Om(8)(5/6C-Flu)]VT, d[Thr(4),Om(8)(5/6C-Flu)]VT, [HO(1)][Om(8)(5/6C-Flu)]VT, [HO(1)][Thr(4),Om(8)(5/6C-Flu)]VT and oxytocin fragments.

25. The method of claim 23, wherein said psychopharmacologic agent is selected from the group consisting of sedatives, tranquilizers, antipsychotics,
 10 antidepressants and anticonvulsants.

26. The method of claim 23, wherein said psychopharmacologic agent affects the opiate, noradrenergic, dopaminergic, serotonergic, glutamatergic and GABAergic systems.

27. The method of claim 23 wherein said therapeutically effective amount is
 15 10ug/mL.

28. The method of claim 23 wherein said composition is oxytocin.

29. The method of claim 23, wherein said disorder including repetitive behaviors is selected from the group consisting of Obsessive-Compulsive Disorder, eating disorders, Body Dysmorphic Disorder, trichotillomania,
 20 hypochondriasis, Tourette's Syndrome, Depersonalization Disorder, Impulse Control Disorder, Pathological Gambling Disorder, Internet Addiction Pyromania, Compulsive Shopping Disorder, Compulsive Sexual Behaviors, kleptomania, Intermittent Explosive Disorder, Sydenham's Chorea Torticollis and Stereotypic Disorders.

30. The method of claim 23, wherein said disorder including social deficits is selected from the group consisting of Social Anxiety Disorder, Schizoid Personality Disorder, Schizotypal Personality Disorder, Borderline Personality Disorder, attachment disorders and attachment disorders secondary to other factors.

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31. The method of claim 23, wherein said disorder including cognitive deficits is selected from the group consisting of Alzheimer's Disease, Jacob creutzfeld's Disease, Down's Syndrome, Mild Cognitive Decline, Attention Deficit Disorder and Attention Deficit Hyperactivity Disorder.

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